Work Orde		3360		*10!	5360*							Page 1	
Revision ID: Item Name:	D3499-042  Cable Guard	Stort Otro 2 00	*2*	Accept	*N900		100	)*	Setup	Start Stop	171	S1* S2*	
Start Date: Required Date:	8/01/13 8/01/13	Start Qty: 2.00 Req'd Qty: 2.00	* <b>2</b> *		Cust Item Customer:								
Reference:	0,01,10	2.04 60)			Customer								
Approvals:	Process Plan	n: MCZ	Date: 13 108 - 0	<b>√</b> Tooling:	· I	Date:			Run	Start	*N	R1*	
ripprovide			_	SPC (Y/N):		Date:				Stop	*N	R2*	
Sequence ID/ Work Center II		Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	t Rej Qty	•	Reject Number	Insp. Stamp	
Draw Nbr	Revi	sion Nbr					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						_
D3499	Rev	C			,								
100		Pick Kit		0.00									_
*100* Packaging Packaging		Memo		0.00				_2			<del>}</del>	F14-0	16-1
110				0.00				۵				_	/ . ſ
*110* Small Fab		Maria		0.00							75	14-00	3-10
Small Fab		<b>Memo</b> 1- assemb	ole per dwg	(	M								
120 *120*		QC5- Inspect part con	npleteness to step on W/O	0.00 H	0/19			9	f .	f			
QC		Memo		0.00	<b></b>				_ <i>,</i>				

Quality Control

			DQA:	_ Date:	-
NCR:	Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE			

											QA Closed:	Date	e:
Work Orde	er:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part I	No.					Rework Scrap Use-as-is Work Order Update			Skid-tube  Machining  noforming  Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update	ı	nitial	Act	tion	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data										<del>- `</del>			,
Equip/Tooling		1											
Operator		1									j		
Material													,
Setup													
Other												<u>,                                     </u>	
Process		]					1						
Supplier													
Training							1						
Unapproved							ł						
						F	AUL	T CATE	GORY	-			
Landi	ng (	Gear				General					_		
		Bending				Bend		Grain			Ovalized		Pressure/Forced
		Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspect	on Incomplete		Part incorre	ct	Weld
		Crushed/	Crimped			Burrs		Instruct	ions Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
		Cuffs				Contamination		Mainte	enance		Part Moved		
		Heat Trea	at			Countersink		Mislabe	eled		Positioned V	Vrong	
		Inspection	n Strip in	Tube		Cut Too Short		Misread	i		Power Loss/	Surge [	Other
		Ripples in	Bend			Drill Holes		Offset					
		Torque W	/aves in E	xtrusio	n 🗀	Drawing		Out of 0	Calibration				
		Turning S	equence			Finish		Out of S	Sequence				
1		Wave/Tw	ist in Tub	e e		Folio		Outside	Dimensions				

Work Orde		5360		*105	360*							Page 2	2
Item ID:	D3499-042		Α	ccept	*N900	0	100	)* s	Setup	Start	*NI	Q1*	
Revision ID:					14.57(7(7)	. , ,	, .	•	,	<b> </b>	1.71	. )	
Item Name:	Cable Guard									Stop	*N	S2*	
Start Date:	8/01/13	Start Qty: 2.00	*2*		Cust Item II	D:							
Required Date:	8/01/13	<b>Req'd Qty:</b> 2.00	*2*		<b>Customer:</b>					1			
Reference:			,										
Approvals:	Process Pla	an:	Date:	Tooling:	Da	ite:		I	Run	Start	*N	R1*	
••	QC:		Date:	SPC (Y/N):	Da	ite:				Stop	*N	R2*	
Sequence ID/ Work Center II	D .	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp	
130		Identify as per dwg & Sto	ock Location.	0.00				_				4.5	
*130* Packaging		Мето	<u> </u>	0.00				2x	_	/	1-4	0-19	-
Packaging						,							DA 26 9-8
140		QC21- Final Inspection	- Work Order Release	0.00									
*140* QC Quality Control		Memo		0.00				_ML	<u>ブ</u>	14	-06-	-19	-

J4-6-19

									DQA:	Date:		
NCR: Ye	s / No				WORK ORDER NON-C	CONFORM	MANCE / UF	PDATE	QA Closed:	Date:		
Work Order:	· :				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS		
Part No					Rework Scrap Use-as-is Work Order Update	Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	1	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other	
Root				Descri	ption of work order update	Initial	Ad	ction	Sign &			
Cause	Date	Step	Qty	(	or Non-conformance	Chief Eng	Desc	cription	Date	Verification	QC Inspector	
Doc/Data								,				
Equip/Tooling												
Operator												
Material												

## **FAULT CATEGORY Landing Gear** General Bend Grain Ovalized Pressure/Forced Bending BOM/Route Centre Not Concentric to O/S Over/Under tolerance Temperature/Cure Hardware Weld Broken/Damaged Inspection Incomplete Part Incorrect Cracks Crushed/Crimped Burrs Instructions Incomplete/Unclear Part Lost/Missing Wrong Stock Pulled Cuffs Contamination Maintenance Part Moved Positioned Wrong Countersink Mislabeled Heat Treat Other Inspection Strip in Tube Cut Too Short Misread Power Loss/Surge Ripples in Bend Drill Holes Offset Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Wave/Twist in Tube Folio Outside Dimensions

Setup
Other
Process
Supplier
Training
Unapproved

**Picklist Print** August-01-13 11:24:22 AM Work Order ID: Parent Item: Parent Item Name: Comments:

105360

D3499-042

Cable Guard

**Start Date: 8/01/13** 

Required Date: 8/01/13

Page 1

Start Qty: 2.00

Required Qty: 2.00

IPP Rev:A New Issue 06-05-05 JLM

IPP Rev:B As per Rev B 06-08-31 JLM

IPP Rev:C as per dwg revC DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purc <u>h</u>	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3C5A Bolt		Purchased	No			100	Each	1,628.0000	2	4	F	14-0	6-18
				Location		Loc Qty	Lo	c Code					
				FG I	29190	5				4			
					122800	5							
				ST350		28							
					116419	28		•					
,				ST512		1595							
					124221	730							
•					125388	865							
AN3C6A		Purchased	No			100	Each	1,033.0000	3	6	F	- 14/~	06-1
Bolt							_					17	
* · · · · · · · · · · · · · · · · · · ·				<b>Location</b>		Loc Oty	Lo	oc Code					
· .				FG		10			-				
					122416	10							
				FP001	122599	30 30							
				FP002	122399	. 1							
					111982	1			<del></del>				
4 -				ST351	111702	17						•	
					122416	17							
-				ST512		975							
					m <u>125709</u>	975				5			
AN960C10L	NAS1149C0332R	Purchased	No		_	100	Each	0.0000	10	20			06-1
Washer					19499					20_	!_!	14-	-00-10

NCR:	Yes	/ No					WORK ORDER NON-C	O	NFORI	MANCE / UPI	DATE	QA Closed:	Date	e:	
Nork Orde	er:						DISPOSITION				AGAINST D	EPARTMENT	/PROCESS		
						ı	Rework	1		Skid-tube	Crosstube		Water Jet	$\neg$	Engineering
Part N	No.					١	Scrap	1	1	Machining	Small Fab	Pro	d. Eng. Coor.	ヿ	Quality
						١	Use-as-is		Thern	noforming	Finishing	Rec/Sto	e/Packaging		Other
NCR I	٧o.						Work Order Update	1		Large Fab	Composite		Supplier	٦	
	•									-					
Root					Desc	rip	tion of work order update		nitial	Act	ion	Sign &		T	
Cause		Date	Step	Qty		o	r Non-conformance	Ch	ief Eng	Descr	ription	Date	Verification		QC Inspector
oc/Data					1		•								
quip/Tooling		:										1			
perator								1							
laterial							,								
etup				1											
ther															
rocess					:									- 1	
upplier														1	
raining														l	·
napproved		,										1		-	
							F	AUL	T CATE	GORY					\$4.40° L
Landi	ng (	Sear			.*		General								
		Bending			Γ	$\neg$	Bend		Grain			Ovalized		$\Box$ t	Pressure/Forced
	П	Centre No	ot Concer	ntric to	o/s	目	BOM/Route		Hardwa	re	Γ	Over/Under	tolerance	$\prod_{7}$	Temperature/Cure
		Cracks				$\neg$	Broken/Damaged		Inspecti	on Incomplete	Γ	Part Incorred	rt T	٦,	Weld
		Crushed/0	Crimped		Γ		Burrs		Instruct	ions Incomplete/L	Jnclear	Part Lost/Mi	ssing	一	Wrong Stock Pulled
		Cuffs					Contamination		Mainte	nance		Part Moved	_	_	-
		Heat Trea	it		F		Countersink		Mislabe	eled		Positioned V	/rong		
		Inspection		Tube	f		Cut Too Short		Misread		<u> </u>	Power Loss/		$\Box$	Other
	Ripples in Bend Drill Holes				Offset										
	Torque Waves in Extrusion Drawing				Out of (	Calibration									
		Turning S			r	_	Finish	Г	i	Sequence					
	Wave/Twist in Tube			-	Folio		1	Dimensions		<del> </del>			_		

Date:

	•		
Location	Loc Qty	Loc Code	
FG	10		
85222	10		
ST061	718		******
83608	3		
91325	223		
99099	492		
ST062	1027		
103845	500	•	
93886	527		

4

August-01-13 11:24:22 AM

D3672-1

Phenolic Washer

**Shop Packet Print** 

102266

Manufactured

Page 2

			DQA:
NCR:	Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE	

·	,						-			QA Closed:	Date	::
Work Orde	ı <del>r.</del>				DISPOSITION				AGAINST D	EPARTMENT	/PROCESS	
Part N					Rework Scrap		!	Skid-tube Crosstub  Machining Small Fa  Thermoforming Finishin		<b>-</b>	Water Jet	Engineering Quality Other
NCR N	o	<del>,</del>			Use-as-is Work Order Update		Į.	Large Fab	Finishing Composite	Rec/stor	re/Packaging Supplier	Other
Root				Descri	ption of work order update		nitial	Ac	ction	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data												"
quip/Tooling												
Operator [												
Material [												
Setup												
Other												
Process												
Supplier												
Fraining		}										
Jnapproved												
					F/	AUL	T CATE	GORY				
Landir	ng Gear				General		•		_			_
<u></u>	Bending				Bend		Grain		L	Ovalized		Pressure/Forced
	Centre N	ot Conce	ntric to (	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	Cracks			ļ	Broken/Damaged		Inspecti	on Incomplete		Part Incorred	ct	Weld
	Crushed/	/Crimped			Burrs		Instruct	ions Incomplete/	/Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs			<u>.                                    </u>	Contamination		Mainte	nance		Part Moved		
	Heat Tre	at			Countersink		Mislabe	led	_	Positioned V	Vrong	_
	Inspection	on Strip in	Tube		Cut Too Short		Misread	I	L	Power Loss/	Surge	Other
	Ripples i	n Bend			Drill Holes		Offset					
	Torque V	Waves in I	Extrusio	n [_	Drawing		Out of 0	Calibration				
	Turning Sequence Finish		Finish		Out of S	Sequence						
	Wave/Twist in Tube		Folio	Outside Dimensions								

Date:

August-01-13 11:24:22 AM

Work Order ID:

105360

Parent Item:

D3499-042

Parent Item Name:

Cable Guard

**Start Date: 8/01/13** 

Required Date: 8/01/13

Start Qty: 2.00

Required Qty: 2.00

MS21043-3 Nut	Purchased	No	100	Each	1,180.0000	5	10 FF 14-06-18
				_			

Location	Loc Oty	Loc Code	
FG 128	239D 80 80		<u> </u>
103691	80		
GA	106		
123899	106		<del></del>
ST315	994		
12170	. 13		
123899	196		-
12455	785		

											DQA	A: D	ate:	
NCR:	Yes	/ No				<b>WORK ORDER NON-</b>	COI	NFORM	MANCE / UP	PDATE				,
		•							•		QA Close	d: D	ate:	
Work Ord	or.					DISPOSITION				AGAINST DE	PARTMEN	IT/PROCESS		
Work ord	<b>C</b> 1.					Rework	٦		Skid-tube	Crosstube	1	Water Je	t 🗀	Engineering
Part I	No.					Scrap	┧	8	Machining	Small Fab	Pı	rod. Eng. Coor		Quality
						Use-as-is	1	ŧ	noforming	Finishing		ore/Packaging	<u> </u>	Other
NCR	No.					Work Order Update	1		Large Fab	Composite	1	Supplie		
Root					Descri	ption of work order update		Initial	Ad	ction	Sign &			
Cause		Date	Step	Qty	(	or Non-conformance	Ct	nief Eng	Desc	cription	Date	Verificati	on	QC Inspector
Doc/Data														
Equip/Tooling														
Operator														:
Material														İ
Setup														
Other			j									1		
Process	_								•		:			
Supplier		=												
Training		i												
Unapproved				1					<u> </u>		<u> </u>			
							AUI	T CATE	GORY					
Landi	~	ı			r	General	_	1		<b>_</b>	1		_	1
	_	Bending				Bend	Grain		Ovalized	_	<b> </b>	Pressure/Forced		
	Centre Not Concentric to O/S Cracks Crushed/Crimped				o/s	BOM/Route	_	Hardwa	<del> </del>		-1	Over/Under tolerance		Temperature/Cure
						Broken/Damaged	$\vdash$	4 '	· ·	1 1		rect	-	Weld
					L	Burrs	-	•	ons Incomplete/Unclear		Part Lost/I	_		Wrong Stock Pulled
	<u> </u>	Cuffs			ļ	Contamination	<u> </u>		<del> </del>		Part Move			
	_	Heat Trea			_	Countersink	<u> </u>	Mislabe		<u> </u>	Positioned	-	_	1
1	L.	Inspectio	n Strip in	Tube		Cut Too Short		Misread	1	Ĺ	Power Los	s/Surge		Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

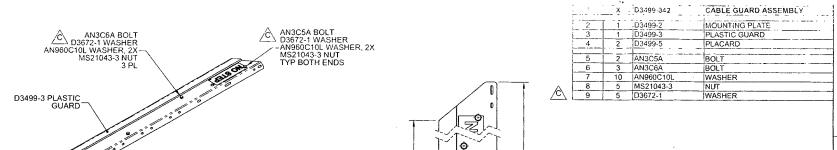
Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G





45.57

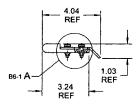
REF

105360 MLJ 13-08-06

NO

		D3672 √_REF	?-1 WASHER
	AN3C6A BOLT REF	/\KEF	AN3C5A BOLT
AN960C10L WASHER	A		
REF			
	7	MS210 REF	043-3 NUT
		DETAIL A	<b>A</b> B4-1

D3499-2 MOUNTING PLATE



⊕

51.00

REF

## **D3499-042 CABLE GUARD ASSEMBLY**

С	3.245 W REVISE WAS N	/AS 3.255 TOLERAI AS 1515H3	(ZN B NCE 8	O CURRENT STANDARDS. 8-3}; 3.24 WAS 3.25 (ZN D3-3); 8-2.01 WAS 2.00 (ZN D3-3); D3672-1 D3-1, D5-1, D7-1); ADD IDENTIFY ICR-09-045	RF	09.06.19	
В	RE-DES	IGN D349	9-2F/-	3	МВ	06.08.15	
Α	NEW IS	SUE			МВ	06.04.11	
REV.			1	DESCRIPTION	BY	DATE	
DESIG	4		1	DART AEROSPACI	E USA	INC.	
DRAW	٧	R		PORT HADLOCK			
CHECK	ED	W		DRAWING NO.		REV. C	
MFG. A	PPR.	te	$\overline{}$	D3499		SHEET 1 OF 4	
APPRO	VED	17/4	シ	TITLE		SCALE	
DE APP	PR.	-##		CABLE GUARD		NTS	
DATE 09.06.19				COPYRIGHT © 2006 BY DART AEROSPACE USA, INC.  THIS DOCUMENT IS REVIVED AND COMPOSED WITH A SUPPLIED WITHE EXPRESS CONDITION THAT IT IS  NOT TO RE VISILED FOR ANY REPORTED OR COMMANDANTED TO ANY DIMES REPORT WITHOUT			

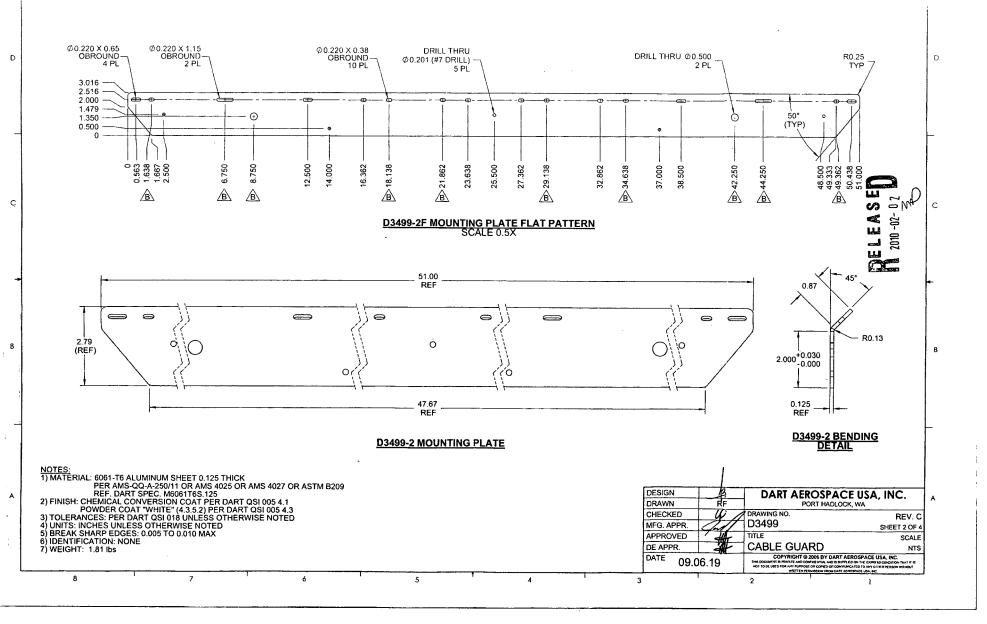
NOTES:	
1) MATERIAL: N/A	
2) FINISH: N/A	
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED	
4) UNITS: INCHES UNLESS OTHERWISE NOTED	
E PREAK CHARR EDGES, O ME TO A MAN	

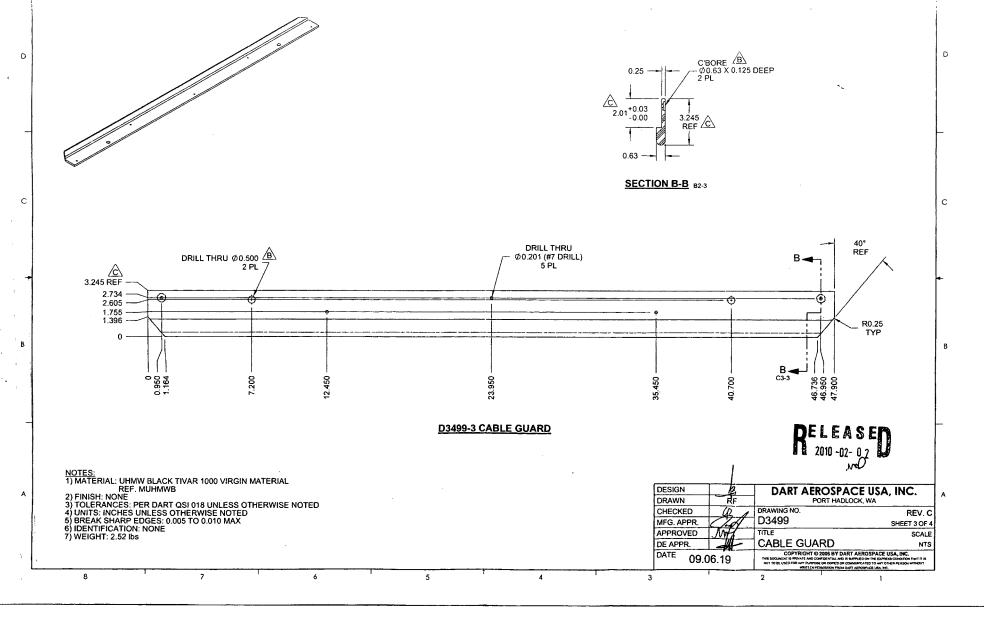
D3499-5 PLACARD 2 PL

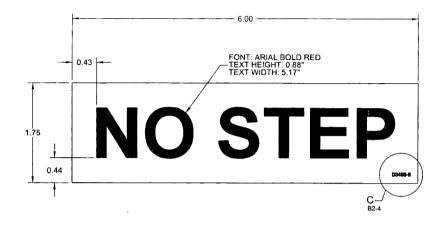
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3499-041/-042" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 3.90 lbs

·A

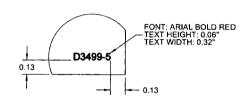
D







D3499-5 PLACARD



DETAIL C B5-4

DESIGN	B	DART AEROSPACE	USA, INC.		
DRAWN	RF	PORT HADLOCK, WA			
CHECKED	10	DRAWING NO.	REV. C		
MFG. APPR.	216.	D3499	SHEET 4 OF 4		
APPROVED	-44	TITLE	SCALE		
DE APPR.	#	CABLE GUARD	NTS		
DATE 09.0	6.19	COPYRIGHT © 2006 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS RIPATE AND CONTRICTION, AND IS SUPPLED OF IT BE SOFTED CONTRICTION THAT IT IS NOT TO SE UND FOR ANY ARMOSE CRECOMED OR COMMANDATE TO ANY OTHER RESIDENT WITHOUT			

NOTES:

1) MATERIAL: RED LETTERS ON WHITE ADHESIVE BACK VINYL MANUFACTURED FROM 3M 7 MIL MASKING FILM #8522CP OR AVERY IPM #2031. SIZE IS 6.00" LONG" x 1.75" WIDE

2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE

7) WEIGHT: N/A

Đ

С